

REC'D 18 FEB 2005

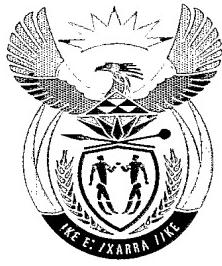
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PCT

# Sertificaat

REPUBLIEK VAN SUID AFRIKA

PATENT KANTOOR  
DEPARTEMENT VAN HANDEL  
EN NYWERHEID



23/04/052579

# Certificate

REPUBLIC OF SOUTH AFRICA

PATENT OFFICE  
DEPARTMENT OF TRADE AND  
INDUSTRY

Hiermee word gesertifiseer dat  
This is to certify that

the documents annexed hereto are true copies of:

Application forms P.1, and P.2, provisional specification and drawings  
of South African Patent Application No.2003/9786 as originally filed in the  
Republic of South Africa on 18 December 2003 in the name of LEONID  
SHPIGEL for an invention entitled: " SEALING ARRANGEMENT."

Geteken te

PRETORIA

Signed at

in die Republiek van Suid-Afrika, hierdie

in the Republic of South Africa, this

dag van

January 2005

day of

J. Steyn

Registrar of Patents

## PRIORITY DOCUMENT

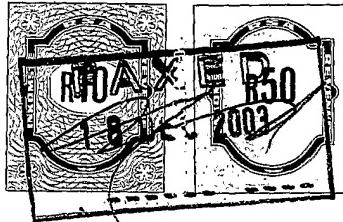
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COMPLIANCE WITH RULE 17.1(a) OR (b)

**REPUBLIC OF SOUTH AFRICA  
PATENTS ACT, 1978**

**PATENT APPLICATION AND ACKNOWLEDGEMENT**

[Section 30(1) - Regulation 22]

The grant of a patent is hereby requested by the undermentioned applicant on the basis of the present application filed in duplicate.

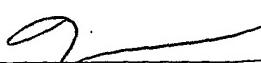
21	01	Official Application No. <b>2003 / 9786</b>	DrG Ref.: 628214
71 Full name(s) and address(es) of applicant(s):  Leonid SHPIGEL 9 Horak Avenue Camps Bay 8001			 
Michael Norman LESTER 36 Sedgemoor Road Camps Bay 8005			
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>FAXED</b>  <b>18 DEC 2003</b> </div>			
54 Title of invention:  SEALING ARRANGEMENT			
The applicant claims priority as set out on the accompanying form P2. The earliest priority claimed is:			
This application is for a patent of addition to Patent Application No.			21   01
This application is a fresh application (section 37) based on Application No.			21   01

**THIS APPLICATION IS ACCCOMPANIED BY THE FOLLOWING:**

- |                                     |  |                        |
|-------------------------------------|--|------------------------|
| <input checked="" type="checkbox"/> | 1. P6 Provisional specification                          | Pages: <b>6</b>        |
| <input type="checkbox"/>            | P7 Complete specification                                | Pages: <b>2 copies</b> |
| <input checked="" type="checkbox"/> | 2. Drawings  | Sheets: <b>1</b>       |
| <input type="checkbox"/>            | 3. P8 Publication particulars and abstract in duplicate. |                        |
| <input type="checkbox"/>            | 4. Drawing for abstract                                  |                        |
| <input type="checkbox"/>            | 5. An assignment of invention                            |                        |
| <input type="checkbox"/>            | 6. Certified priority document(s)                        |                        |
| <input type="checkbox"/>            | 7. Copy of Form P2 and SA Patent Application No          |                        |
| <input type="checkbox"/>            | 8. Translation of the priority document(s)               |                        |
| <input type="checkbox"/>            | 9. An assignment of priority rights                      |                        |
| <input checked="" type="checkbox"/> | 10. P3 Declaration and power of attorney on form P3      |                        |
| <input type="checkbox"/>            | 11. P4 Request for ante-dating on form P4                |                        |
| <input checked="" type="checkbox"/> | 12. P2 Register sheet (in duplicate)                     |                        |

Date: 18 December 2003

**John Spicer  
Patent Attorney**

  
**DR GERNTHOLTZ INC**  
PATENT ATTORNEYS OF APPLICANT(S)

21   01	<b>ADDRESS FOR SERVICE:</b> <b>74 DR GERNTHOLTZ INC</b> <b>PATENT AND TRADE MARK ATTORNEYS</b> <b>P O BOX 8 CAPE TOWN 8000 SOUTH AFRICA</b> <b>30 UNION ROAD MILNERTON 7441</b> <b>TELEPHONE: +27 21 551 2650</b> <b>TELEFAX: +27 21 551 2960</b>
<b>REGISTRAR RECEIVED DESIGNS, TRADE MARKS AND COPYRIGHT OFFICIAL DATE STAMP</b>	
<b>2003 -12- 18</b>	
<b>REGISTRAR VAN PATENTEEN MODELLE, REGISTER VAN TRADE MARKS EN COPYRIGHTS HANDELSMERKE EN OUTEURSREG</b>	

REPUBLIC OF SOUTH AFRICA

## REGISTER OF PATENTS

Official Application No.:			Lodging date: Provisional			Acceptance date:			
21	01	2003 / 9786	22	2003 -12- 18	47				
International Classification:			Lodging date: Complete			Grant date:			
51			22						
Full name(s) of applicant(s)/Patentee(s):									
71	Leonid SHPIGEL Michael Norman LESTER								
Applicants substituted							Date registered		
71	Leonid SHPIGEL							03 - 9 - 04	
Assignee(s):								Date registered	
71									
Full name(s) of inventor(s):									
72	Leonid SHPIGEL Michael Norman LESTER								
Priority claimed			33	Country	31	Number	32	Date	
Title of invention									
54	SEALING ARRANGEMENT								
Address of applicant(s)/patentee(s):									
9 Horak Avenue Camps Bay 8001									
36 Sedgemoor Road Camps Bay 8005									
Address for service		Dr GERNTHOLTZ INC (DrG Ref: 628214)							
74	30 UNION ROAD MILNERTON / CAPE 7441			P O BOX 8 CAPE TOWN 8000	TEL: (021) 551 2650 FAX: (021) 551 2960 / 551 2974 E-MAIL: mail@gpa.co.za				
Patent of addition No.		74				Date of any change			
Fresh application based on					Date of any change				

## FORM P6

REPUBLIC OF SOUTH AFRICA  
PATENTS ACT, 1978  
**PROVISIONAL SPECIFICATION**

[Section 30(1) - Regulation 27]

21	01	Official Application No.:	2003 / 9786	DrG Ref.:	628214
22	Lodging date:	2003 -12- 18			
71	Full name(s) of applicant(s): Leonid SHPIGEL Michael Norman LESTER				
72	Full name(s) of inventor(s) Leonid SHPIGEL Michael Norman LESTER				
54	Title of invention SEALING ARRANGEMENT				

ADDRESS FOR SERVICE:  
DR GERNTHOLTZ INC  
PATENT AND TRADE MARK ATTORNEYS  
P O BOX 8 CAPE TOWN 8000 SOUTH AFRICA  
30 UNION ROAD MILNERTON 7441  
TELEPHONE: +27 21 551 2650  
TELEFAX: +27 21 551 2960

DrG REF: 628214

**TITLE OF INVENTION**

Sealing arrangement.

**FIELD OF INVENTION**

- 5 The present invention relates to a sealing arrangement.

More particularly, the present invention relates to a sealing arrangement for sealing a container.

**BACKGROUND TO INVENTION**

Containers, such as cardboard cartons, are widely used for containing goods 10 for protection and for transportation. The containers are normally sealed with staples and/or packaging tape to prevent the goods from falling out of the containers and to prevent unauthorised access to the goods.

However, in many instances theft from the containers is committed by people transporting the containers. The people break the packaging tape and, after committing the theft, reseal the containers with new packaging tape so that the 15 theft is not immediately obvious after delivery of the container. The thieves are normally well supplied with a variety of different packaging tapes, in some instances even with customised company packaging tapes, and are therefore able to open and reseal many different types of containers without being 20 caught.

It is an object of the invention to suggest a sealing arrangement, which will assist in overcoming these problems.

## SUMMARY OF INVENTION

According to the invention a sealing arrangement includes a body; first support means associated with the body and being adapted to support a supply of adhesive tape; second support means associated with the body and being

5 adapted to support a supply of marking tape; a printing unit associated with the body and being adapted to print on the marking tape; and feeding means being adapted to feed the marking tape for adhesion to the adhesive tape prior to attachment to a container, so that in use the marking tape is sealed between the adhesive tape and the container.

10 The adhesive tape may be packaging tape.

The second support means may be a rotatable boss being adapted to rotatably support a reel of marking tape.

The marking tape may be a thin strip of paper.

15 The marking tape may be non-linear in form, for example it may have a zigzag appearance.

The marking tape may be provided with serrated edges.

The printing unit may be adapted to print encoded matter or bar codes on the marking tape.

20 The printing unit may be adapted to print on the marking tape only when the marking tape is moving through the printing means.

The printing unit may include a receiver unit being adapted to receive variable information to be printed on the marking tape.

The receiver unit may be operable by radio.

The unit means may be an impact printer, an inkjet printer or a laser printer.

The invention extends to a container sealed by a sealing arrangement as set out herein.

Also according to the invention a method of sealing a container includes the  
5 steps of printing matter onto marking tape; of adhering the marking tape to adhesive tape so that the matter is at least partially visible through the adhesive tape; and of sealing a container with the adhesive tape.

The method may include the step of altering the matter at random intervals.

10 The matter may be customised company information, encoded information or bar codes.

#### **BRIEF DESCRIPTION OF DRAWINGS**

The invention will now be described by way of example with reference to the accompanying schematic drawings.

In the drawings there is shown in:

15 Figure 1 A side view of a sealing arrangement in accordance with the invention; and

Figure 2 A partial plan view of a container sealed with a strip of tape dispensed from the sealing arrangement shown in Figure 1.

#### **DETAILED DESCRIPTION OF DRAWINGS**

20 Referring to Figure 1 of the drawings, a sealing arrangement in accordance with the invention, generally indicated by reference numeral 10, is shown. The sealing arrangement 10, is in the form of a packaging tape dispenser having a

body 12 with a first rotatable boss 14, for rotatably supporting a reel of adhesive tape 16, such as conventional packaging tape.

The dispenser body 12 further has a second rotatable boss 18, for rotatably supporting a reel of marking tape 20. The marking tape 20 has a narrower width than the adhesive tape 16 and is made of printable material, such as a thin strip of paper. Although not shown in the drawings, the marking tape 20 can be non-linear in form, for example it may have a zigzag appearance or serrated edges.

A printing unit 22 is located between the first and second bosses 14,18 and is adapted to print matter onto at least one side of the marking tape 20. The printing unit 22 is activated only when the marking tape 20 is moving through it, thus only when the tape 16,20 is being dispensed from the dispensing body 10. The printing unit 22 can be an impact printer, an inkjet printer or a laser printer.

The printing unit 22 can optionally include a receiver unit (not shown) which is adapted to receive instructions about what is to be printed on the marking tape 20. The receiver unit can be operated by radio frequency so that the instructions can be centrally distributed to a number of dispensing bodies 12 located at various places, such as in transport vans.

Referring now also to Figure 2, in use, the adhesive tape 16 is dispensed in a normal manner from the dispenser body 12. The marking tape 20 is stuck to the adhesive tape 16 so that as the adhesive tape is dispensed, the marking tape 20 is also pulled off its reel 18 and moved through the printer unit 22. This causes the printer unit 22 to print matter 24, such as the company name, onto one side of the marking tape 20. After the matter 24 is printed, the marking tape 20 is adhered to the adhesive tape 16. This prevents the

matter 24 from being altered unless the adhesive tape 16 or the marking tape 20 is destroyed.

As the tape 16,20 exits the dispensing body 12, the adhesive tape 16 is used to close and seal a container 26. Any tampering or opening of the container 26 will cause the marking tape 20 to be destroyed. Any unauthorised resealing of the container 26 will then be indicated by the adhesive tape 16 not being provided with marking tape 20 or by the marking tape 20 being printed with the wrong matter 24.

If the adhesive tape is made of a transparent or opaque material, the matter 24 can be easily checked after delivery of the container 26 to ensure no tampering occurred.

Date: 18 December 2003



John L. Spicer

**DR GERNTHOLTZ INC**

15 Patent Attorneys of Applicant(s)

P O Box 8; Cape Town 8000; South Africa

30 Union Road; Milnerton 7441; South Africa

Tel: (021) 551 2650

20 Fax: (021) 551 2960

DrG Ref.: 628214

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2003 / 9786

LEONID SHPIGEL  
MICHAEL NORMAN LESTER

NO OF SHEETS 1  
SHEET NO 1  
DRG Ref.: 628214

FIG. 1

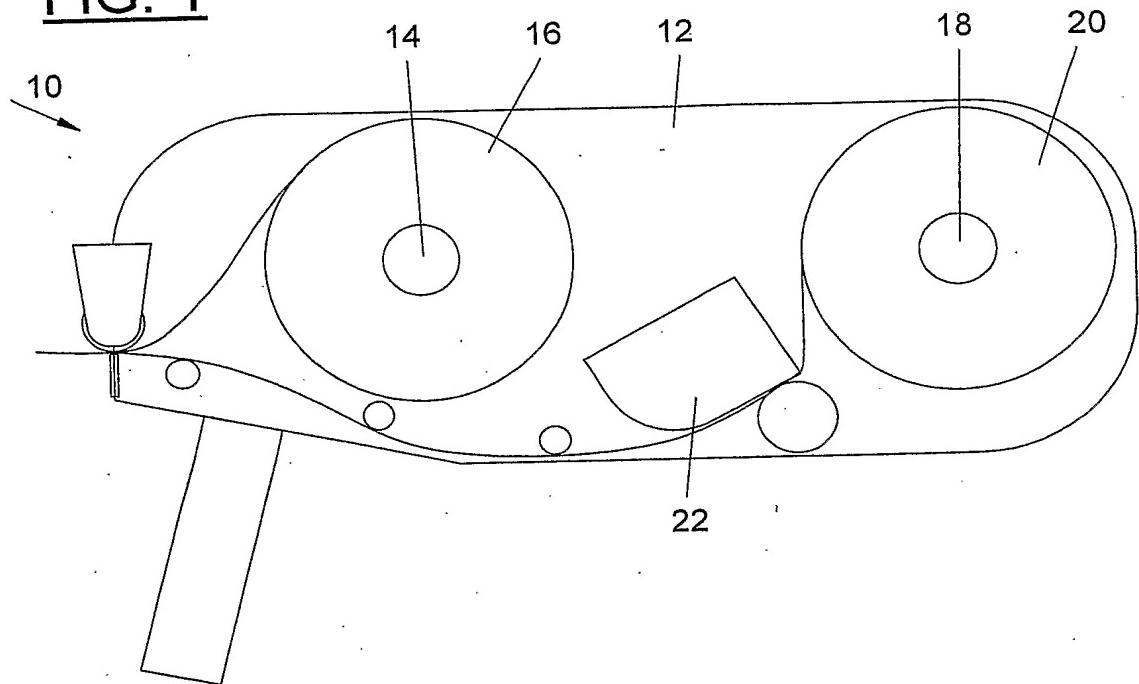


FIG. 2

